



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,163	06/19/2003	Eric Viscito	02CON382P	7165

25700 7590 01/04/2007

FARJAMI & FARJAMI LLP  
26522 LA ALAMEDA AVENUE, SUITE 360  
MISSION VIEJO, CA 92691

EXAMINER
----------

WONG, ALLEN C

ART UNIT	PAPER NUMBER
----------	--------------

2621

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/04/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/600,163

Applicant(s)

VISCITO ET AL.

Examiner

Allen Wong

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 29-31 is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 2/17/04, 6/2/06.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 10-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Veltman (5,481,543).

Regarding claim 10, Veltman discloses a system for processing data, said data including a plurality of compressed pictures, each of said compressed pictures including a plurality of bits starting with a first bit, said system comprising:

a decoder configured to store said plurality of compressed pictures in a pre-decoder buffer (fig.22B, element 45 is a video decoder, and element 42 is the pre-decoder buffer);

wherein said data further includes a pre-decoder buffer delay for each of said plurality pictures, and wherein each of said plurality of pictures is removed from said pre-decoder buffer at a time calculated by adding said pre-decoder buffer delay to a removal time of its immediate previous picture (fig.22B, note that when the first picture enters the pre-decoder buffer 42, it is at the first time t1, and note the second picture enters the pre-decoder buffer 42 at the second time t2, note the third picture exits the pre-decoder buffer 42 at the third time t3, and note the fourth picture exits the pre-decoder buffer 42 at the fourth time t4; and that at element 52, the time stamps of the

Art Unit: 2621

pictures are kept track in element 52 and then processed in element 55 for executing the decoding of pictures at video decoder 45).

Note claims 11-13 have similar corresponding elements.

Regarding claims 14 and 18, Veltman discloses a bitstream generated by a system, said bitstream comprising:

a plurality of compressed pictures, each of said compressed pictures including a plurality of bits starting with a first bit (col.22, ln.27-34); and

a pre-decoder buffer delay for each of said plurality pictures (fig.22B, element 42);

wherein a decoder stores said plurality of compressed pictures in a pre-decoder buffer, and wherein each of said plurality of pictures is removed from said pre-decoder buffer at a time calculated by adding said pre-decoder buffer delay to a removal time of its immediate previous picture (fig.22B, note that when the first picture enters the pre-decoder buffer 42, it is at the first time  $t_1$ , and note the second picture enters the pre-decoder buffer 42 at the second time  $t_2$ , note the third picture exits the pre-decoder buffer 42 at the third time  $t_3$ , and note the fourth picture exits the pre-decoder buffer 42 at the fourth time  $t_4$ ; and that at element 52, the time stamps of the pictures are kept track in element 52 and then processed in element 55 for executing the decoding of pictures at video decoder 45).

Note claims 15-17 and 19-21 have similar corresponding elements.

Regarding claim 22, Veltman discloses a system for processing compressed data, said system comprising:

a video coding layer (fig.22A, element 201A is codes the group of images I, P and B pictures);

a network adaptation layer (fig.22A, element 203A outputs the image data with auxiliary data like header data and time stamp data);

a first set of parameters for said video coding layer (fig.22A, element 201A is codes the group of images I, P and B pictures, where the standard MPEG image comprises of another layer of data like slices, and a slice of data contains a plurality of macroblocks, where a macroblock contains a luminance blocks (Y) and chrominance (Cr and Cb) blocks ); and

a second set of parameters for a multiplex of said video coding layer and said network adaptation layer (fig.22A, element 203A outputs image data in multiplexed bit stream packetized data where the image data is compressed along with other auxiliary data such as headers and time stamps).

Note claims 23-25 have similar corresponding elements.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-9 and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Veltman (5,481,543) in view of Yoshida (7,058,081).

Regarding claim 1, Veltman discloses a system for processing compressed data, said compressed data including a first picture and a subsequent second picture, each of said pictures including a plurality of bits starting with a first bit, said system comprising:

a decoder configured to receive said compressed data and decompress said compressed data, said decoder having a pre-decoder buffer configured to buffer said compressed data (fig.22B, element 45 is a video decoder, and element 42 is the pre-decoder buffer);

wherein said first bit of said first picture enters said pre-decoder buffer at a first time and said first bit of said second picture enters said pre-decoder buffer at a second time, and wherein said first bit of said first picture leaves said pre-decoder buffer at a third time and said first bit of said second picture leaves said pre-decoder buffer at a fourth time (fig.22B, note that when the first picture enters the pre-decoder buffer 42, it is at the first time t1, and note the second picture enters the pre-decoder buffer 42 at the second time t2, note the third picture exits the pre-decoder buffer 42 at the third time t3, and note the fourth picture exits the pre-decoder buffer 42 at the fourth time t4; and that at element 52, the time stamps of the pictures are kept track in element 52 and then processed in element 55 for executing the decoding of pictures at video decoder 45).

Veltman does not specifically disclose wherein a difference based on said second time and said first time is not less than a difference based on said fourth time and said third time. However, Yoshida teaches the use of determining the differences

Art Unit: 2621

between the time difference values between the third and fourth time stamps and the difference values between the first and second time stamps are obtained (col.9, ln.36-47). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Veltman and Yoshida, as a whole, for facilitating the transmission of packetized image data (Yoshida col.4, ln.20-26).

Note claims 2-4 have similar corresponding elements.

Regarding claim 5, Veltman discloses a method for processing compressed data through a pre-decoder buffer, said compressed data including a first picture and a subsequent second picture, each of said pictures including a plurality of bits starting with a first bit, said method comprising:

storing said first bit of said first picture in said pre-decoder buffer at a first time (fig.22B, note that when the first picture enters the pre-decoder buffer 42, it is at the first time t1);

storing said first bit of said second picture in said pre-decoder buffer at a second time (fig.22B, note the second picture enters the pre-decoder buffer 42 at the second time t2);

removing said first bit of said first picture from said pre-decoder buffer at a third time (fig.22B, the third picture exits the pre-decoder buffer 42 at the third time t3); and

removing said first bit of said second picture from said pre-decoder buffer at a fourth time (fig.22B, the fourth picture exits the pre-decoder buffer 42 at the fourth time t4; and that at element 52, the time stamps of the pictures are kept track in

element 52 and then processed in element 55 for executing the decoding of pictures at video decoder 45).

Veltman does not specifically disclose wherein a difference based on said second time and said first time is not less than a difference based on said fourth time and said third time. However, Yoshida teaches the use of determining the differences between the time difference values between the third and fourth time stamps and the difference values between the first and second time stamps are obtained (col.9, ln.36-47). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Veltman and Yoshida, as a whole, for facilitating the transmission of packetized image data (Yoshida col.4; ln.20-26).

Note claims 7-9 have similar corresponding elements.

Regarding claim 6, Veltman decompresses the compressed image data (fig.22B, element 45).

Regarding claim 26, Veltman discloses a system comprising:

an encoder configured to generate compressed data, said compressed data including a first picture and a subsequent second picture, each of said pictures including a plurality of bits starting with a first bit (fig.22A, element 201A); and

a transmitter configured to time transmission of said compressed data such that a pre-decoder buffer is capable of inputting said first bit of said first picture at a first time and inputting said first bit of said second picture at a second time, and said pre-decoder buffer is further capable of outputting said first bit of said first picture at a third time and outputting said first bit of said second picture at a fourth time (fig.22B, note



Art Unit: 2621

that when the first picture enters the pre-decoder buffer 42, it is a at the first time t1, and note the second picture enters the pre-decoder buffer 42 at the second time t2, note the third picture exits the pre-decoder buffer 42 at the third time t3, and note the fourth picture exits the pre-decoder buffer 42 at the fourth time t4; and that at element 52, the time stamps of the pictures are kept track in element 52 and then processed in element 55 for executing the decoding of pictures at video decoder 45).

Veltman does not specifically disclose wherein a difference based on said second time and said first time is not less than a difference based on said fourth time and said third time. However, Yoshida teaches the use of determining the differences between the time difference values between the third and fourth time stamps and the difference values between the first and second time stamps are obtained (col.9, ln.36-47). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Veltman and Yoshida, as a whole, for facilitating the transmission of packetized image data (Yoshida col.4, ln.20-26).

Note claims 27-28 have similar corresponding elements.

### ***Allowable Subject Matter***

3. Claims 29-31 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: The prior art does not specifically disclose the combination of limitations as disclosed in claim 29: A method of analyzing a bitstream, said bitstream having a plurality of compressed pictures and a plurality of messages, said method comprising

Art Unit: 2621

the steps of: locating a buffering information message including bit rate information and buffer size information; extracting said bit rate information and said buffer size information from said buffering information message; computing a bit rate and a buffer size from said bit rate information and buffer size information; selecting a random access point in said bitstream; locating a buffering period message following said random access point; extracting random access buffering information from said buffering period message; computing from said random access buffering information a picture removal time associated with the first picture following said buffering period message; wherein for each compressed picture in the bitstream following said first picture, said method further comprising: locating a picture message including picture removal time delay information; extracting said picture removal time delay information from said picture message; computing from said picture removal time delay information a picture removal time of said compressed picture; wherein for each compressed picture following said buffering period message, said method further comprising: counting the number of bits representing said compressed picture; computing an initial arrival time and a final arrival time of said compressed picture, wherein said initial arrival time is equal to an earlier of said final arrival time of the immediately previous compressed picture or equal to a sum of a fixed time plus a sum of removal delays of all of said compressed pictures between said first compressed picture following said buffering period message and said compressed picture, including said compressed picture, and wherein said final arrival time is equal a sum of said initial arrival time and a time calculated based on the number of bits associated with

Art Unit: 2621

said compressed picture at said bit rate; and verifying that a difference between said final removal time and said initial arrival time does not exceed the time for reaching said buffer size at said bit rate.

### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen Wong whose telephone number is (571) 272-7341. The examiner can normally be reached on Mondays to Thursdays from 8am-6pm Flextime.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Groody can be reached on (571) 272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/600,163  
Art Unit: 2621

Page 11

A handwritten signature in black ink, appearing to read 'Allen Wong', with a stylized, sweeping flourish extending from the end.

Allen Wong  
Primary Examiner  
Art Unit 2621

AW  
12/26/06